



NCDOT Prioritization 3.0 Project Summary

SPOT ID: H141876

Mode: Highway

Status: Submitted

I-40

From/Cross Street: US 25A (Sweeten Creek Road)

Specific Improvement Type: 8 - Improve Interchange

To:

Project Category: Statewide Mobility

Length: 2

TIP#:

Fully Funded in Draft STIP? No

Cost to NCDOT: \$15,660,000

Description:

Upgrade interchange - EB ramp

Division(s): Division 13

County(s): BUNCOMBE

MPOS(s)/RPO(s): French Broad River MPO

Project Location



Statewide Mobility Total Score: 32.09

| Quantitative Score | | Division Engineer Local Input Points | MPO/RPO Local Input Points |
|---|-------|---|---------------------------------------|
| Congestion (V/C) (30%) | 70.44 | N/A | N/A |
| Safety (10%) | 50.00 | | |
| Economic Competitiveness (10%) | 1.54 | | |
| Multimodal + [Freight & Military] (20%) | 26.19 | | |
| [Travel Time] Benefit/Cost (30%) | 1.87 | | |
| Totals: Weight: 100% Weighted Score: 32.09 | | | |

Regional Impact Total Score: 40.44

| Quantitative Score | | Division Engineer Local Input Points | MPO/RPO Local Input Points |
|--|-------|---|---------------------------------------|
| Congestion (V/C) (25%) | 70.44 | Percent: 15% Points: 100 | Percent: 15% Points: 0 |
| Safety (10%) | 50.00 | | |
| [Travel Time] Benefit/Cost (25%) | 1.87 | | |
| Accessibility / Connectivity (10%) | 23.64 | | |
| Totals: Weight: 70% Weighted Score: 25.44 | | | |

Division Needs Total Score: 44.46

| Quantitative Score | | Division Engineer Local Input Points | MPO/RPO Local Input Points |
|--|-------|---|---------------------------------------|
| Congestion (V/C) (20%) | 70.44 | Percent: 25% Points: 100 | Percent: 25% Points: 0 |
| Safety (10%) | 50.00 | | |
| [Travel Time] Benefit/Cost (20%) | 1.87 | | |
| Totals: Weight: 50% Weighted Score: 19.46 | | | |

Project Data ***Existing Conditions**

| | |
|---|------------|
| Existing Cross-Section: | |
| Speed Limit: | 60 |
| Length (miles): | 2 |
| Facility Type: | Freeway |
| Access Control: | Full |
| Functional Classification: | Interstate |
| Terrain Type: | Rolling |
| Lane Width: | 12 |
| Paved Shoulder Width: | 10 |
| Roadway has Curb & Gutter? | No |
| Volume (AADT): | 70908.79 |
| Capacity: | 101103.94 |
| Volume/Capacity Ratio: | 0.7 |
| % Autos: | 93% |
| % Trucks: | 7% |
| Truck Volume: | 5238.65 |
| Crash Density: | 0 |
| Crash Severity: | 0 |
| Critical Crash Rate: | 0 |
| Crash Frequency: | 33.3 |
| Severity Index: | 66.7 |
| County Tier Designation: | 3 |
| Non-Interstate STRAHNET Route? | No |
| Average Commuting Time: | 19 |
| Existing Median Type (for Cost Estimation): | Divided |
| Pavement Condition Rating: | 92 |
| Actual Congested Speed: | 29.74 |
| Travel Time Index: | 1.51 |

Project Benefits

| | |
|--|-------------|
| Project Cross-Section: | |
| Speed Limit: | 60 |
| Length (miles): | 2 |
| Facility Type: | Freeway |
| Access Control: | Full |
| Functional Classification: | Interstate |
| TerrainType: | Rolling |
| DOT Design Lane Width: | 12 |
| DOT Design Paved Shoulder Width: | 10 |
| Travel Time Savings for 30 Years (Total): | 1288000 |
| Travel Time Savings for 30 Years (Autos): | 1192844.15 |
| Travel Time Savings for 30 Years (Trucks): | 95155.85 |
| Long-Term Employment: | 24.9 |
| % Change in Economy: | 5.83E-06 |
| Provides Direct Connection to Transportation Terminal? | No |
| Does project upgrade how the roadway functions? | No |
| In CTP or LRTP? | Yes |
| CTP/LRTP Name: | FBRMPO CTP |
| CTP/LRTP Completion Year: | 2014 |
| Submitted by: | Division 13 |

* Data reflects calculations which include weighted averages (where applicable) and represent raw output from the Department's SPOT On!ine tool and associated databases.

Project Ownership**Division**

| Division | Percent | Regional Impact | Division Needs |
|------------------------------|----------------|------------------------|-----------------------|
| Division 13 | 100% | 100 | 100 |
| | 0% | 0 | 0 |
| | 0% | 0 | 0 |
| TOTAL Division Points | | 100 | 100 |

MPO/RPO

| MPO/RPO | Percent | Regional Impact | Division Needs |
|-----------------------------|----------------|------------------------|-----------------------|
| French Broad River MPO | 100% | 0 | 0 |
| | 0% | 0 | 0 |
| | 0% | 0 | 0 |
| TOTAL MPO/RPO Points | | 0 | 0 |

Project Cost and Source

| | | |
|------------------------|---------------------|----------------------|
| Construction Cost: | \$13,500,000 | Cost Estimation Tool |
| Right-of-Way Cost: | \$2,160,000 | Cost Estimation Tool |
| Utilities Cost: | \$0 | Cost Estimation Tool |
| Total Project Cost: | \$15,660,000 | |
| Other Funding: | \$0 | None |
| Cost to NCDOT : | \$15,660,000 | |